

### **Abstract of the Disclosure**

An image processing apparatus supporting both discrete wavelet transform and discrete cosine transform with reduced hardware resources. The image processing apparatus is composed of an  
5 input unit receiving a plurality of pixel data, a controlling unit selecting a desired transform from among discrete wavelet transform and discrete cosine transform, and providing a plurality of coefficients depending on the  
10 desired transform, and a processing unit which processes the pixel data using the plurality of coefficients to achieve the desired transform.